

ABSTRACT OF THE DISCLOSURE

A battery pack apparatus includes: a battery pack composed a plurality of rechargeable batteries arranged in parallel, the rechargeable batteries having heat medium passages formed therebetween; a heat insulation cover, formed from heat insulation material, for covering the substantially entire surface of the battery pack with a supply passage and a discharge passage provided between the heat insulation cover and the battery pack, the supply passage supplying a heat medium to the heat medium passage while the discharge passage discharging the heat medium from the heat medium passage; and a supply device for supplying the heat medium to the supply passage. In this battery pack apparatus, heat exchange occurs on the substantially entire surface of each rechargeable battery by making the heat medium flow in the heat medium passages, thereby performing temperature control efficiently and uniformly. Moreover, escape of heat to the outside and effects of heat from the outside are prevented by using the heat insulation cover.